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EDC 423 Coiro

Informational Text Plan

**Part 1: Text Analysis**

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| **Resources** | **Challenges** |
| * The title does a great job summarizing what the article is about, giving the students a clear purpose before they read. * The title page has a great picture which allows the students to visualize the subject of the entire article. * The subtitles accurately explain what each new section will be about. The subtitles also split up the text so the students will not feel as overwhelmed with the smaller parts. * The first paragraph of “Built to Hunt” (p. 12) summarizes what was said in the previous section before moving on, ensuring the students understand. * The words “adaptation” and “characteristic” are defined within the text on p. 12, which is helpful to students who are not familiar with that vocabulary. * The pictures connect well with the text, especially the diagram on p. 17. * The ext is very descriptive which could make it easy to visualize the cheetah and its adaptations. For example, “When a cheetah runs, its spine arches up, then it stretches out. At the same time, the cheetah’s legs fold under its body.” (p.14) * “Cheetahs in the Wild” paragraph at the very end of the text (p.16) does a great job of summarizing main ideas from the text, highlighting the main ideas. * The “Cheetahs in the Wild” diagram/picture (p.16-17) is great resource to help students visualize the adaptations in relation to an actual photograph. The adaptations are labeled and easy to follow. * The “Wordwise” glossary helps define words in the text that students may not be familiar with. These words are bolded so students know to refer to the glossary. | * Some vocabulary requires prior knowledge that the reader may not have i.e “grasslands” (p.12), “termite mound” (p.13). These words in particular are not defined in the text. * Some words are defined, but before the difficult word even appears. For example, “It’s tan, spotted fur is an adaptation, too. It helps the cheetah blend in with the grass. This is called camouflage.” (p.13) Students could easily miss this definition and continue to read, confused. * The text references speed when it states (p.14) “Gazelles can run as fast as 80 kph (50 mph).” This requires prior knowledge to understand. Students may have no concept of speed. * Some pages (p. 14) have a lot of text and information with no pictures or real breaks which may be overwhelming to a struggling reader. * The text often makes analogies between adaptations of a cheetah and everyday things. For example, the author says that “the heavy tail acts as a rudder.” This requires students to have prior knowledge to better understand the simile. Without knowing what a rudder is and does, students may get confused. * On p.16 beginning with “the cheetah in the grass has spotted the gazelles” the text goes into more of a narrative form about a cheetah hunting. Students might get confused in the shift from informational text to more of a narrative next. * When the author says, “a perfect hunter for this place” (p.16), the children may not understand what place the author is referring to. This is a referential challenge. * The vocabulary terms are defined at the very end of the text. Students may not know to flip to this section when they do not understand a bolded word. * When the author says “A cheetah’s tail and feet help the cat change direction with ease” the students may not realise that the “cat” refers back to the “cheetah.” It is a difficult referential relationship. |

**Part 2: Learning Goals**

1. Main Ideas:
   * A cheetah’s grooved feet, long tail, and light body help a cheetah run fast.
   * A cheetah’s sharp eyes and camouflaged fur make cheetahs great hunters.
2. Big Ideas:
   * Animals have adaptations to help them survive and flourish in a particular environment.
   * All environments have *different* requirements for survival.
3. Learning Goals:
   * Explain the benefit of animal adaptations for survival in the wild.
   * Contrast the adaptations of different organisms (in different environments.)

**Part 3: Planning the Launch**

1. Introduce the concept of an adaptation and relate it to humans and human behavior.

* Sample Dialogue :
  + Q: “Does anyone know what an adaptation is?”
  + A: “A change?”
  + F: “Good, an adaptation is a behavior or body part that helps an animal survive. Humans have been around for a long time. What do you think are some adaptations that have helped us survived?
  + A: “ We only have two legs.”, “Humans don’t have a lot of fur.”
  + F: “Great thoughts! How might some of these adaptations helped us survive?”
  + A: “It could be easier to run on two legs.” , “Humans can live in warm places because they do not have a lot of fur.”
  + F: “That is very true. So these adaptations help us to survive in our environment. Do you think all adaptations are the same for every environment?”
  + A: “Maybe.”
  + F: “Let’s think about that more as we watch this next presentation and read the article “See How Cheetahs Survive in the Wild.” When you think about some adaptations that other animals have to make, keep in mind the habitat in which they live.”

1. Continue to introduce the concept of adaptations and begin to activate prior knowledge about different adaptations between other animals and environments.

* Activity: Show a Powerpoint with pictures of common animals, and ask questions to activate knowledge students have about these animals and their adaptations.
  + ex. Polar bear
    - Prompting Question: Where does a polar bear live? What helps it stay warm?
  + ex. Fish
    - Prompting Question: Where do fish live? How do they breathe underwater?
  + ex. Camel
    - Prompting Question: Where do camels live? How do they store water?
  + ex. Cheetah
    - Prompting Question: Where do cheetahs live? What adaptations do they have for their environment?
* KWL Chart
  + Fill out the Know (K) on some features and facts that you know about the cheetah.

1. Quickly set a purpose.

* “Great job class! Now that we have talked a little about what an adaptation is and about adaptations of different animals, we are now going to focus on the Cheetah. In the text, “See How Cheetahs Survive in the Wild” we will learn about some key adaptations that cheetahs have made in order to survive in the grasslands.”

**Part 4: Planning the Exit**

1. Finish the KWL Chart.

* Have the students fill out the “Learned” column in the KWL chart. Have the students each come up with a few facts on their own first, allowing the students to think before being merely given the answer. Next, let the students share their ideas with the class, making sure they give evidence directly from the text to support all of their facts.

1. Reflection: Have the students complete a writing activity using the KWL Chart

* Rather than merely moving on, have the students reflect on their KWL chart by having them answer the following questions:
  + Is there anything you listed in the “Know” column that you learned was not true after reading? Why was it incorrect?
  + What was the most surprising thing you learned from the reading?
  + Using your KWL chart for reference, what do you think was the most important idea from the article? Why is this idea so important?

1. Have the students participate in a brief extension activity to cement their knowledge from the article and connect it further to the real world.

* Split the class into groups of four and give each group a different habitat (forest, desert, grassland, ocean, swamp, arctic tundra, etc.). Have the students learn about their assigned environment.
* Ask the students to create their own animal that would best survive in their environment. Have the students write a written description of the animal as well as draw a picture of what it might look like.
* Have the students present their animals to the class, and explain why they designed their animal the way they did, according to the environment they had. (This forces them to think about what an adaptation is and why it is important)
* Finally, ask the students why the animals were so different. (This helps the students understand how different adaptations are important for different environments.)

**Part 5: Planning Ways to Support Student Interactions with Text Ideas**

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| **Page/Ending Phrase** | **Question** |
| 1. 12 “Yet the cheetah is one of the world’s most successful predators.” | Q: “What characteristics do we know about the cheetah so far in our reading?”  A: “That the cheetah can’t hunt at night.”, “The cheetah can’t climb.” , “A cheetah can only run fast for 30 seconds.”  F: “Do these facts lead us to believe that the cheetah is a good hunter?”  A: “It doesn’t really sound like it.”  F: “You’re right it doesn’t, then what have we talked about that may make the cheetah such a good predator?”  A: “Adaptations”  F: “So you are saying adaptations helped the cheetah survive better in its environment? That’s a good point; let’s read more to see.” |
| p.12 “A characteristic is a trait that makes something different than others.” | Q: “In this section, the author defined both adaptations and characteristics. Can anyone explain to me how these two terms might be different? Use your text to tell me.”  A: “An adaptation is more of a change that helps for survival. A characteristic is like any trait.”  F: “That’s a good point. An adaptation and a characteristic could be similar as well. What is one similarity between these terms?”  A: “A cheetah’s fur could be both an adaptation and a characteristic of the cheetah.”  F: “Good job! So you guys are saying that adaptations could be characteristics of a living thing that help it survive. Keep that in mind as we keep reading!” |
| p.13 “ Now it’s harder for the gazelle too see the cheetah.” | Q: “Let’s pause here; what new information have we learned in these paragraphs?”  A: “That the cheetahs fur is camouflage.”, “That the cheetah has marks under its eyes.”  F: “Great and these are all examples of what?”  A: “Adaptations”  F: “Good, what information does the author tell us on why these adaptations make the cheetah a better predator?”  A: “The markings help cut down the glare of the sun.” “The camouflage makes it so the cheetahs prey cannot see it.”  F: “Very good! Let’s keep reading to see what other adaptations a cheetah has to make it a good hunter.” |
| p.14 “Its body is lean, and even its bones have adaptations to help it run fast across the grasslands.” | Q: “Think about if the cheetah did not live in the grasslands. In what ways might it look different?”  A: “It might be fatter because it wouldn’t have to run through grass.” “They might have different colored fur to blend in with another habitat.”  F: “Do you think the cheetah would be one of the most successful predators in the world if it did not live in the grasslands?”  A: “No, because the cheetah is adapted to the grasslands. A cheetah would not be prepared for another environment.”  F: “Why wouldn’t a cheetah be prepared for another environment?”  A: “Every environment requires different adaptations.”  F: “Great observation! Let’s keep reading.” |
| p.14 “If it doesn’t, it must find other prey, or go hungry.” | Q: “What are some new adaptations that we learned about in this section?”  A: “The cheetah has bigger lungs.”, “The cheetah has a long flexible spine.”, “The cheetah’s hip bones can pivot.”  F: “Why are these adaptations so important for the cheetah?”  A: “They make the cheetah a better hunter. The cheetah could run faster to catch its food and survive.”  F: “Great observation! These are just more examples to show us how adaptations help an organism survive.” |
| p.14 “A cheetah’s tail and feet help the cat change direction with ease.” | Q: “Let’s stop a second. Do you think that these adaptations we just learned about would be helpful for an animal living in the ocean?  A: “No, an animal in the ocean would not need a long tail or feet with ridges.”  F: “Why not?”  A: “Because animals in the ocean don’t need to run fast.”  F: “That’s very true. So what does that tell us about adaptations? Why is that important?”  A: “It tells us that every environment requires different adaptations.”  F: “Perfect, let’s keep going!” |
| p.16 “Stronger animals like these will try to steal this meal from the cheetah.” | Q: “Why do you think the author chose to write this part of the article more like a story?”  A: “To make it more interesting.”  F: “That’s true. Why might have the author used such descriptive words when he described the adaptations when the cheetah was hunting.”  A: “So we could picture the adaptations in our head and see how they helped the cheetah catch the prey.”  F: “Great job! The author does a great job getting us excited to think about how each one of the cheetah’s adaptations helped it catch the food and survive in the wild.” |
| p.17 “All these adaptations make the cheetah an awesome predator.” | Q: “The author keeps saying that adaptations make the cheetah a good hunter. Why is this so important?”  A: “Because the cheetah needs food to survive.”  F: “That’s right! So why are these adaptations so important to the cheetah?”  A: “The adaptations help the cheetah catch food which it needs to survive. So I guess the cheetah needs the adaptations to live.”  F: “Perfect! Look at the picture on this page to review some of the things we learned in this article as we finish completing the “W” part of our KWL Chart.” |

**Part 6: Partner Reflection**

1. What knowledge did you bring to the task that helped make partner work and this learning experience about text-based discussion productive?

*Sara Mazur*

Being a biology major, I knew that animals make adaptations to their environment primarily over time to help them survive. I knew that this was an important concept to bring into the reading so I helped construct one of the learning goals to ensure that students understand adaptations as a response to the environment. I then planned the launch, I think this activity activates student’s prior knowledge well, because it uses animals that are more common, and have obvious adaptations such as a fish or a camel. It gets them thinking about different environments and how animals survive there. I think my previous knowledge helped steer us as a partnership in the direction of a big main idea in the text, which we were then able to make a learning goal and incorporate into our lesson more.

*Mike Taglienti*

I have also taken many biology classes as a pharmacy major, so I understood which parts of the text were most important and should be highlighted for the students. I knew that all environments required different adaptations (and that this is such an important concept in biography) so I chose to stress this when I made the second learning goal. I also did the exit activity, which I feel did a sufficient job in wrapping up the main points of the article and hopefully allowed students to grasp the big ideas of the text as well. I believe that we both worked together great on parts one and five, truly making the informational text plan a cohesive whole. I think my prior knowledge definitely contributed to final product.

1. What knowledge did you gain from your partner as part of this learning experience?

*Sara Mazur*

I think that Mike brought a lot of his previous learning experience to the challenges and resources section of the task. Being from a biology background, some of the concepts did not seem difficult to me, but Mike brought another perspective and was able to add on to the challenges section of part one. While doing the assignment he brought a lot of insight to what he thought may be confusing about the launch such as short term vs. long term adaptations, something that I had not thought about. He also designed a great exit activity that really reinforces our learning goals but is also engaging and fun for students.

*Mike Taglienti*

I think Sara did a great job with the launch. I absolutely love her idea to make a Powerpoint with the different animals in different environments. Not only does it get the students thinking about adaptations, but it addresses the learning goals before even reading the text, which I think is very important. Sara’s biology perspective was great to have as we put together the learning goals together, as well. It’s always great to see another perspective when trying to plan out questions. The way she thought students would answer some of the questions was much different than the way I thought the students would answer, for example. It was great to see both opinions. Overall, Sara was a great collaborator and so easy to work with! Her unique perspective definitely contributed to the overall assignment.